## 2012 NORTHEAST RECREATIONAL BOATER SURVEY



A partnership among industry, government, and nongovernmental organizations conducted a survey of marine recreational boaters from Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut and New York during the 2012 boating season. Thousands of randomly selected boaters participated in the monthly online survey and mapped their boating trips throughout the season. Boaters also reported their related expenditures over the year, and shared their opinions on relevant issues, such as safety and boating compatibility near other ocean uses or users, including offshore wind farms, ports, and protected areas. Through an effective public-private partnership, survey collaborators provided input and assisted with every phase of the study, including survey scoping and development, study design, implementation of the 2012 Northeast Recreational Boater Survey (2012 NE Survey), and interpretation of the survey results.

Results include regional and state maps of popular recreational boating locations; busy boating routes; and activities, such as recreational fishing and wildlife viewing. Economic analyses revealed that 907,000 boating trips on the ocean generated approximately \$3.5 billion and the equivalent of nearly 27,000 year-round jobs in the Northeast in 2012. The results can be used by ocean managers, the boating industry and others in many ways, such as identifying waters important to recreational boaters; informing business planning and economic development; and planning for compatible and sustainable ocean uses.

This Project Summary is part of a suite of documents describing the 2012 NE Survey. A detailed Technical Report and a State Summary for each participating state are available for download at www.SeaPlan.org. Survey data are available on the SeaPlan website and the Northeast Ocean Data Portal at www.northeastoceandata.org.























### Sizing Up An Ocean Tradition







A deep connection with the sea has long been an important part of the Northeast's culture. Boating, sailing, whale-watching, and sport fishing are treasured pastimes from Maine to New York, but little information exists on where such activities occur. For the first time on a regional scale, the 2012 Northeast Recreational Boater Survey fills some of these information gaps by mapping boating activity and assessing the economic impact of this important ocean sector.

Our nation's oceans provide rich resources to support society's most pressing needs. Today, entrepreneurs and government leaders are proposing innovative new projects, such as offshore wind energy developments and aquaculture facilities, in marine areas that help meet our country's growing needs for energy, food, and economic prosperity. We are thus challenged to foster this innovation while supporting traditional ocean uses and sustaining ocean health.

The goal of productive, sustainable seas can be achieved through ocean planning that is based on reliable information and stakeholder input. According to the National Marine Manufacturers Association, in 2011, nearly 35% percent of the United States adult population, about 83 million people, participated in recreational boating. Yet, for this nationally important sector, surprisingly little is documented about where people boat, the economic impact of recreational boating, their viewpoints on important relevant issues and other information useful for ocean managers, the boating industry and boaters themselves.

To help fill this information gap for one region of the U.S., the 2012 Northeast Recreational Boating Survey (2012 NE Survey) gathered spatial, temporal, and socio-economic data on marine recreational boating and boating-based activities, including fishing, diving, swimming, relaxing, and wildlife viewing.

The survey team designed the 2012 NE Survey to fill specific information needs identified by government agencies and the boating industry to develop industry-informed, science-based data on marine recreational boating activity in the Northeast region. As such, the study focused on marine boat owners with boats registered or documented in coastal counties in the Northeast and characterized the activity of nearly 400,000 marine boaters from Maine to New York.

SeaPlan, an independent nonprofit ocean science and policy group, partnered with the Northeast Regional Ocean Council (NROC), the states' coastal agencies, Marine Trades Associations composed of many private industry representatives, First Coast Guard District, and others to conduct this study. Through this effective public-private partnership, survey collaborators provided input and assisted with every phase of the study, including survey scoping and development, study design, implementation of the 2012 NE Survey, and interpretation of the survey results.

The results are useful for resource planners and the boating industry. The maps describe where marine recreational boating activities occur in time and space, and the economic analysis describes the contribution of marine recreational boaters' spending to regional and state economies. The information can be used in a variety of ways, including to help industry and planners work together to encourage compatibilities among ocean uses and improve safety.

"Connecticut's Recreational Boating Industry was pleased to be a partner in the development of this survey. The best way to document boating activity and obtain reliable and useful data is to get it directly from the active boaters themselves, as they enjoy their favorite recreation. Marketing and sales information is available from manufacturers but the economic benefits and business generated from the actual use of boats can be very helpful to our industry in future business planning."

- Grant W. Westerson, President Connecticut Marine Trades Association, Inc.

#### **Methods**

The study team adapted an effective methodology from the 2010 Massachusetts Recreational Boater Survey to invite a representative random sample of registered and documented vessel owners in the Northeast to participate in the 2012 NE Survey. To characterize the 373,766 eligible registered boats from coastal counties in Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut and New York, the study team invited approximately 68,000 randomly selected boat owners, and over 12,000 boat owners (18.5%) participated in the 2012 NE Survey.

Between May and October, 2012, monthly surveys collected data from participating boaters. Boaters provided trip-related and yearly expenditures; mapped boating locations, routes and activities using an innovative online mapping tool; provided demographic information; and offered opinions on topics, such as boating safety.

The study team used statistical methods to analyze demographic data and the "Impact analysis for PLANning" (IMPLAN) economic model to develop economic impact estimates. GIS specialists analyzed the spatial data to develop maps of boating activity. After the survey was complete, the team convened five workshops with state coastal planners and over eighty industry representatives to review the results to ensure proper characterization of the data.

#### **Power of Partners**

The survey was conducted through a partnership involving the boating industry, government, and non-governmental organizations. This partnership was involved in all phases of the project, from developing the methodology to reviewing preliminary results.

#### **Partnering Organizations**

- SeaPlan
- Northeast Regional Ocean Council (NROC)
- First Coast Guard District
- Maine Coastal Program
- Maine Marine Trades Association
- The New Hampshire Coastal Program at the N.H. Department of Environmental Services
- Massachusetts Office of Coastal Zone Management
- Rhode Island Coastal Resources Management Council
- Rhode Island Marine Trades Association
- Connecticut Department of Energy and Environmental Protection
- Connecticut Marine Trades Association
- New York Department of State

#### **Sponsors**

Several marine industry organizations and others contributed financial support for the 2012 Northeast Recreational Boating Survey, including Maine Coastal Program, Grady-White Boats, Inc., Massachusetts Marine Trades Association, Connecticut Marine Trades Association, Marina Bay Boston Harbor, US Harbors and the Gordon and Betty Moore Foundation. Several Marine Trades Associations also co-sponsored workshops to review and discuss data.

#### For more information contact:

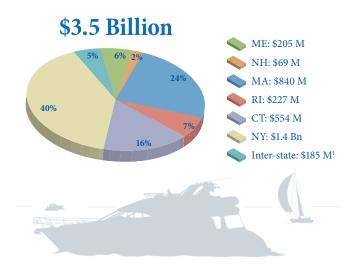
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# regional findings

Survey results include economic impact estimates, maps of recreational boating activity and a wide-range of data on the boating community.

#### **Impact on Northeast Economy**



#### Marine Recreational Boating Supports Many Jobs

Model results estimate that marine recreational boating contributed \$3.5 billion to the Northeast economy in 2012 and increased the labor demand in the region by the equivalent of nearly 27,000 year-round jobs. The top three sectors with increased labor demand are:

- Leisure and hospitality: 7,720 year-round jobs
- Trade, transportation and utilities: 6,728 year-round jobs
- Boat repair and other services: 5,650 year-round jobs

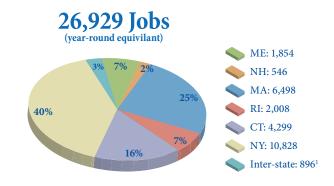
Sector categories are defined in the 2012 NE Survey Technical Report.

### Top Goods and Services Purchased by Marine Recreational Boaters

Economic impact estimates include spending associated with boat trips on the water; visits to boats while docked or moored; other expenditures (e.g. seasonal storage, boat insurance); and additional impacts of this spending on other economic activity. In 2012, the average boater in the Northeast spent:

- \$1,151 on boating trips, with most spending on boat fuel/oil (\$368); equipment and repairs (\$220); and restaurant meals (\$195).
- \$1,700 on visits to their boat, with most spending on equipment, maintenance, repairs and upkeep (\$818); transient/guest dockage (\$232); and boat fuel/oil (\$158).
- \$5,848 on other expenditures, with most spending on docking mooring, and storage (\$1,378); routine yearly maintenance (\$1,190); and boat loan payments (\$950).

#### Recreational Boaters' Spending in Northeast Marine Waters Supports Labor Demand



This study does not account for boat sales and commercial recreational boat activity, or the spending from boats that are registered from states outside the Northeast; as well as jobs that result from this spending, such as boat building.

<sup>1</sup> These additional indirect and induced impacts occurred within the six-state study region as a result of the interrelationship between economic activity in each state and economic activity elsewhere in the region. These impacts cannot be attributed to a particular state.



#### **Boat Owner Demographics**

Survey results paint a clearer picture of the marine recreational boating community in the Northeast, including the following demographic information:

- Average age: 59.4 years
- Gender: Over 90% of survey participants were male
- Income: 55.7% of survey participants earned an annual income in 2011 of \$100,000 or greater, and 37.6% earned less than \$100,000

#### Most Boater Spending Occurs in the State Where Their Boat is Registered

In the Northeast, over 79% of boaters' expenditures occur within the state where their boat is registered. These estimates may reflect that boaters are spending most of their time at the dock, which is supported by the survey results and by industry local knowledge.



#### Boaters' Opinions on Other Ocean Uses and Boating Safety

Boaters shared their opinions on issues important to the boating community and coastal planners, such as marine safety and interactions with other ocean uses. Responses to a question related to ocean use compatibility are summarized to the right.

Based on boaters' opinions on whether they could continue to enjoy boating near other activities and/or structures in the ocean, 62% responded that boating was compatible with conservation and protected areas. Furthermore, more than half of boaters responded that recreational boating was compatible with offshore wind farms and aquaculture (finfish and shellfish farming). See Technical Report for details.

Other noteworthy observations relate to boaters' opinions on boating safety. For example, most survey participants cited Survey Question:

Sometimes boating can occur near other activities. In your opinion, how likely is it that you can continue to enjoy boating near the following structures or activities:

Offshore Wind Farm Turbines

Offshore Wind Farm Turbines

Somewhat or Very Likely
Somewhat or Very Unlikely
Undecided
NA

Conservation and Marine
Protected Areas (e.g., sanctuaries)

Aquaculture
(finfish and shellfish)

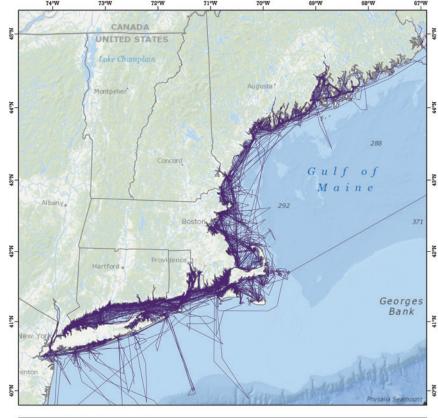
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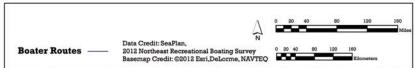
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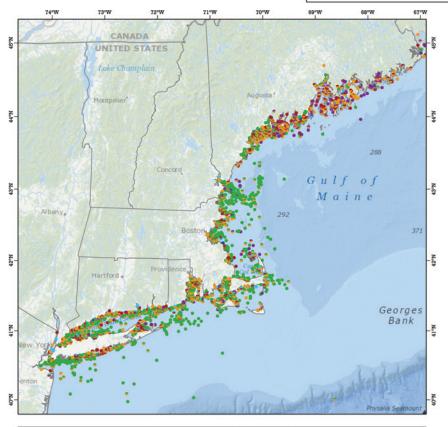
fellow boaters' behavior as one of their largest safety concerns on the water, specifically focusing on "inconsiderate actions by others" (74%), "lack of knowledge of navigation rules by others" (58%), and "use of alcohol by boat operators" (43%).

#### Boaters Draw Routes and Report Trip Information Using Online Mapping Tool

The map to the right provides a view of the boating routes mapped by boaters through the 2012 Northeast Recreational Boater Survey. In total, boaters mapped 5,114 boating routes that included straight courses between major cities and travel destinations, such as Boston Harbor and Provincetown, MA; and winding routes around coastal attractions, such as the islands in Penobscot Bay, ME.







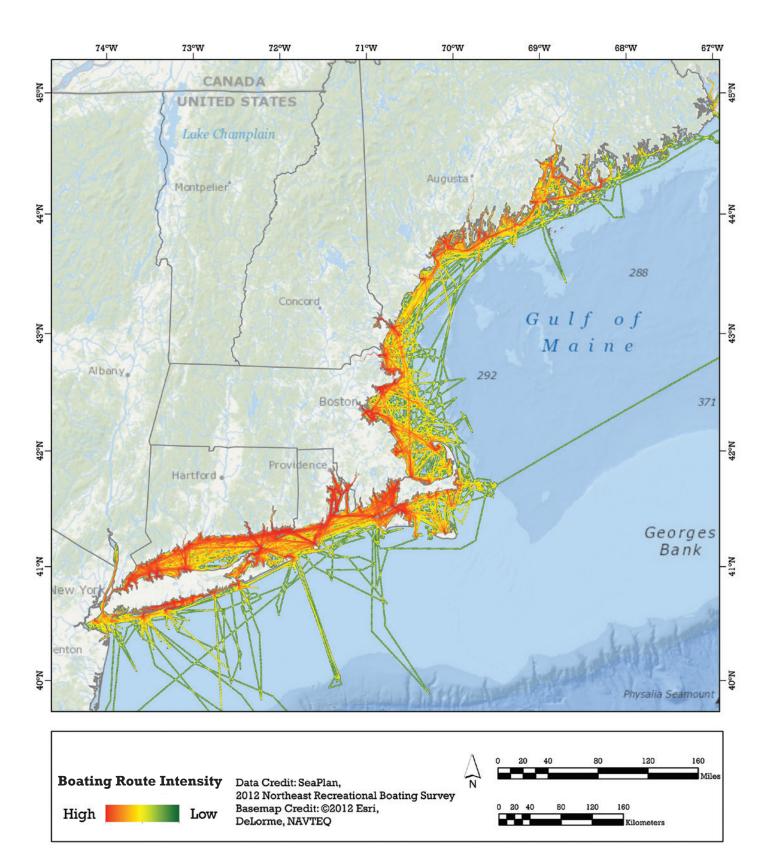
Basemap Credit: ©2012 Esri DeLorme, NAVTEQ

Activity

## Most Common Boating Activity is Sport Fishing and Boaters Primarily Target Striped Bass

The map to the left shows the location and types of activities recreational boaters conducted while boating, including diving, swimming, sportfishing, wildlife viewing, or other activities. Multi-color points represent a boater engaging in several activities at one location.

Fishing was the most frequently recorded activity, accounting for over half of the activity points. The survey data corresponded with commonly known fishing grounds, such as Jeffreys Ledges. Boaters most commonly targeted striped bass (*Morone saxatilis*) while fishing, representing 46% of all fishing activity points.



Most Boating Occurs
Close to Shore and Along
Popular Boating Routes

The map above depicts areas with high and low boating intensity relative to boating activity in the Northeast and adjacent waters. The data collected over the six month season confirmed a basic assumption that most boating occurs close to shore, with over half (52.4%) of the boating routes plotted by boaters occurring within one mile of the coastline. High levels of boating activity also occurred in semi-protected bays, harbors off of major cities, and along commonly used boating routes.

